

# DRYWASH



# USER GUIDE



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## Technical Data Sheet

### Drywash

#### **Product Information**

A waterless, environmentally responsible exterior cleaner which can be used anywhere without the need for valeting equipment or premises.

Removes even the heaviest dirt and grime. It leaves not only a polished finish but also a temporary invisible coating which will protect the vehicle paintwork between washes.

Drywash is the rapid solution for cleaning and polishing any hard surface without the need for water. Ideal for cars on forecourts or in showrooms, keeping van fleets sparkling, and for quick detailing bikes and scooters.

Drywash can be shipped, stored and used without the need for any specialist considerations and does not require applicators to wear specialist personal protective equipment.

#### **Key Features**

- Tested and approved to Boeing and Airbus standards
- Tested and approved by PPG
- Unique formulation with no caustic content or solvents
- Oil and water repellent
- Does not contain silicone

#### **Key Benefits**

- Quick and simple to use
- Non-hazardous
- It cleans and leaves a polished effect finish all in one application
- Cleans and protects by leaving an invisible, hydrophobic barrier on the surface
- Can be used in wet & hot conditions
- Exempt from commercial drainage for car washing requirements

#### **Additional Information**

Simple application; spray a fine mist to the surface, leave for 5-10 seconds, wipe clean with a microfibre cloth, then buff using a clean microfibre.

# SAFETY DATA SHEET

RMX DRYWASH

Page: 1

Compilation date: 12/12/2019

Revision date: 14/01/2020

Revision No: 2

## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product name: RMX DRYWASH

Product code: 8301

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

### 1.3. Details of the supplier of the safety data sheet

Company name: RMX-Global Ltd

Schipol Way

Humberside International Airport

Lincolnshire

DN39 6YH

United Kingdom

Tel: +44 01472563933

Email: [info@rmx-global.com](mailto:info@rmx-global.com)

### 1.4. Emergency telephone number

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification under CLP: This product has no classification under CLP.

### 2.2. Label elements

Label elements: This product has no label elements.

### 2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes.

**Ingestion:** Wash out mouth with water.

**Inhalation:** Consult a doctor.

[cont...]

# SAFETY DATA SHEET

RMX DRYWASH

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## 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** No symptoms.

## 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Not applicable.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Not applicable.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed.

[cont...]

# SAFETY DATA SHEET

RMX DRYWASH

Page: 3

## 7.3. Specific end use(s)

Specific end use(s): No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

Workplace exposure limits: No data available.

### DNEL/PNEC Values

DNEL / PNEC No data available.

### 8.2. Exposure controls

Engineering measures: Not applicable.

Respiratory protection: Respiratory protection not required.

Hand protection: Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

State: Liquid

Colour: White

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: Soluble

Viscosity: No data available.

Boiling point/range°C: 100

Melting point/range°C: No data available.

Flammability limits %: lower: No data available.

upper: No data available.

Flash point°C: Not applicable.

Part.coeff. n-octanol/water: No data available.

Autoflammability°C: No data available.

Vapour pressure: No data available.

Relative density: 0.99-1.00

pH: 7.00

VOC g/l: No data available.

### 9.2. Other information

Other information: No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

[cont...]

# SAFETY DATA SHEET

RMX DRYWASH

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## 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

## 10.4. Conditions to avoid

**Conditions to avoid:** Heat.

## 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids.

## 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicity values:** No data available.

### Symptoms / routes of exposure

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** No symptoms.

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

### 12.4. Mobility in soil

**Mobility:** Readily absorbed into soil.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

## Section 13: Disposal considerations

[cont...]

# SAFETY DATA SHEET

RMX DRYWASH

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## 13.1. Waste treatment methods

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

**Transport class:** This product does not require a classification for transport.

## Section 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**Specific regulations:** Not applicable.

### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

**Other information:** according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

\* indicates text in the SDS which has changed since the last revision.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.



## Export Tariff Code

	E.U.	U.S.
Drywash	3402.12.90	3405.30.00

## Shipping Parameters

Shipping and Storage Temperatures: for all products: up to +40C (100F).  
Do not allow to freeze.

Unit Size	No per box	Size of Box LxWxH	Weight of box
5L Container	4	300mm x 300mm x 390mm	21kg
20L Container	NA	NA	21kg
25L Container	NA	NA	26kg
1000L IBC	NA	NA	NA

Unit Size	Boxes / containers per pallet	Pallet LxWxH	Pallet Weight
5L Container	154*	1.2 x 1.0 x 2.2	1700kg**
20L Container	32	1.2 x 1.0 x 1.1	660kg
25L Container	32	1.2 x 1.0 x 1.1	820kg
1000L IBC	NA	1.2 x 1.0 x 1.16	1030kg

Unit Size	No of Pallets per 20ft shipping container	Weight of full shipping container
5L Container	9	15300kg
20L Container	18 (double stacked)	12,500kg
25L Container	18 (double stacked)	15300kg
1000L IBC	18 double stacked	18450kg

Unit Size	No of Pallets per 40ft shipping container	Weight of full shipping container
5L Container	20	25500kg (weight limited)
20L Container	30 (some double stacked)	20,200 kg
25L Container	30 (some double stacked)	25500kg (weight limited)
1000L IBC	24 (some double stacked)	24720kg (weight limited)

\* 5L boxes will be 22 to a layer, 7 layers high on a pallet for a container. There will be board between layers 4 & 5 for stability

\*\* 7 layers is fine for height but there may be an issue on weight for some forklift trucks. On a 40ft container load is spread across 20 pallets meaning there would be 2300 boxes across 20 pallets at 5.1 layers per pallet

## **Storage and Bottling Information**

**Product name:** Drywash  
**Date of issue:** 20/04/2016  
**Revision number:** 1

**\*\*\*Always refer to the product MSDS prior to storage or use\*\*\***

**Storage method:** Within non-transparent, PET type plastic containers  
**Storage conditions:** Indoor, dry environment, out of direct sunlight  
**Storage temperature window:** 5°C - 40°C  
**Storage period:** Sealed IBC shipping containers - 6 months  
Sealed PET plastic bottles or containers - 18 months

**Note: Drywash should only be stored in a sealed condition and where a trigger spray is to be added, this should only be applied immediately prior to use**

**Note: Always minimise the time the fluid is open to the atmosphere during fluid transfer and where possible avoid aeration at the filling point**

General

Regular cleaning is an integral part of a corrosion prevention and control program. The frequency of cleaning and related treatment will depend on the type of aircraft, operating conditions and environment. It is recommended that aircraft are fully cleaned every 100 days with partial cleaning carried out in between as necessary. (See NOTE).

Cleaning Procedure

ONLY USE micro-fibre cloths or micro-fibre mop heads, regularly changing them to avoid an accumulation of dirt. Micro-fibre cloths and micro-fibre mop heads can be washed and reused. Micro-fibre cloths and micro-fibre mop heads ensure that all dirt is captured in the material itself, resulting in no contamination of the local environment. It is essential to regularly change the cloth to ensure consistent results across the aircraft.

- Use appropriate low pressure spray equipment for the size of application.
- DO NOT AEROSOLISE.

Typical examples of appropriate spray equipment



1.5-2.0L handheld - small application



8L over-shoulder - medium application



16L backpack - large application

**NOTE**

Take care when operating around the aircraft not to cause any damage. If any damage has occurred or is found, report it immediately to a supervisor or maintenance personnel.

- A.** Prepare the aircraft for cleaning by following the appropriate procedures in the aircraft maintenance manual.



- B.** Fit all pitot probe covers and static port blanks.

**WARNING**

FLUIDS ENTERING THE PITOT/STATIC SYSTEM CAN HAVE SERIOUS EFFECTS ON AIRCRAFT SYSTEMS.

- C.** Fit engine blanks if available.



**NOTE**

It is not necessary to fit landing gear covers or close all doors as no residue or overspray is generated.

### **NOTE**

RMX Drywash should be used to clean aircraft surfaces such as Fuselage, Wings, Engine cowlings, horizontal and vertical Stabilisers, Cabin Windows. There is no risk of scratching when using the product as per the application instructions.

- D. Spray a fine mist onto the surface being cleaned.

\*For outdoor use, see Appendix A



### **NOTE**

Work on manageable areas at a time to guard against the fluid fully evaporating. Suggested working area is up to 2m by 2m.

- E. Allow to soak for 15-20 seconds (do not allow to dry completely).



### **NOTE**

For normal dirt removal, go straight to step **G**. For ingrained dirt include step **F** in the process.

- F. For deep ingrained dirt removal, it is possible to use a non-abrasive wash pad to first agitate and loosen the dirt prior to removal.

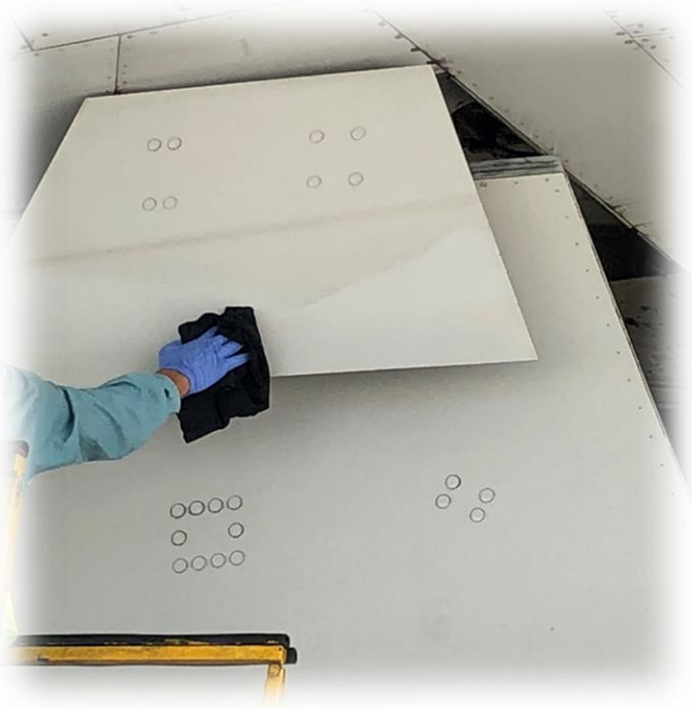
\*See Appendix B



- G. Wipe off using a micro-fibre cloth or micro-fibre mop head.



- H. Gently buff using a clean, dry micro-fibre cloth or micro-fibre mop head.



**NOTE**

Steps **D.** to **H.** may be repeated if required



- I.** Ensure all cleaning equipment is removed from the aircraft.
- J.** Remove all pitot probe covers and static port blanks.
- K.** Remove engine blanks if fitted.
- L.** Restore aircraft to normal configuration I.A.W the procedures in the aircraft maintenance manual.

**Please contact:**

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## Appendix A: When using outdoor

When working outdoor, make the following adjustments to the standard application procedure as necessary in order to maintain the best results.

### Windy conditions

To minimise dissipation and remove the risk of accidental spraying of co-workers, do the following:

- Adjust the spray nozzles from “fine mist” to larger liquid droplets
- Move the spray bottle closer to the surface
- Spray smaller areas at a time

### High temperatures

To use RMX Drywash in high temperatures and direct sunlight, do the following:

- Adjust the spray nozzles from “fine mist” to larger liquid droplets
- Spray a larger amount of liquid on each area than usual, but not so much that you create “run-off”
- Only leave the liquid on the surface for 10 seconds before using the micro-fibre cloths or non-abrasive pads

**Nb. Where the product has dried before removal, just re-spray a small amount to re-wet and lubricate the area prior to use of the micro-fibre cloths or non-abrasive pads.**

### Rain

It is possible to clean aircraft in light drizzle, but the aircraft should not be cleaned during heavy rain. In light rain or drizzle, do the following:

- Adjust the spray nozzles from “fine mist” to larger liquid droplets
- Move the spray bottle closer to the surface
- Replace micro-fibre cloths more frequently than usual and as necessary

## Appendix B: Stubborn stains

Nb. RMX should always be used as a regular cleaner to prevent build up of Ingrained staining rather than a sporadic deep cleaning product since it does not contain the hazardous/harmful solvents and acids required to strip back this type of soiling.

Where the aircraft has been left for a long period of time between cleans or where RMX is being used for the first time, ingrained staining may have occurred on some of the higher degradation areas of the aircraft. For these areas, it may be required to make some alterations to the standard application instructions as set out below.

1. Identify areas with ingrained staining
2. Spray RMX Drywash over these areas
3. Leave the liquid on the surface for as long as practical \*minimum – 10 mins\*
4. Return to the area and re-spray RMX Drywash over the area to lubricate
5. Use a non-abrasive pad to scrub the area until the staining is removed
6. Use a clean micro-fibre towel to remove the dirt from the surface
7. Use a second clean micro-fibre towel to buff the surface to a shiny finish

Once RMX has been used and our protective hydrophobic coating is on the surface the staining doesn't return quickly and when it does, is far faster and easier to remove as it is on top of our coating rather than penetrating the paint.

Regular use of RMX Drywash, especially on high degradation areas of the aircraft will not only provide a better cosmetic appearance of the aircraft exterior, but will make cleaning faster and more efficient and help to protect paint from some contaminants.

# SMI, Inc.

12219 SW 131 Avenue  
Miami, Florida 33186-6401 USA

Phone: (305) 971-7047  
Fax: (305) 971-7048

Attn: Michael Drayton  
RMX-Global Ltd  
Cleethorpes Business Centre  
Humbertson  
North East Lincolnshire  
DN36 4AS United Kingdom

Date: 14-NOV-2014

SMI/REF: 1410-189<sub>R2</sub>  
Report revised for product/Co. name change

Product: **RMX DRYWASH** (received 16-Oct-2014)

Dilution: As received

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**British Aerospace**  
**AIRBUS AIMS09-00-002** (Issue 3, July 2011)  
**EVALUATION OF MAINTENANCE MATERIALS**  
**Exterior and General Cleaners**

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5.3.1	Sandwich Corrosion Test	<u>Conforms</u>
5.3.2	Total Immersion Test	<u>Conforms</u>
5.3.3	Hydrogen Embrittlement Test	<u>Conforms</u>
5.3.4	Paint Softening Test	<u>Conforms</u>
5.3.5	Acrylic Crazeing Test	<u>Conforms</u>
5.3.6	Polycarbonate Crazeing Test	<u>Conforms</u>

Respectfully submitted,



Patricia D. Viani, SMI Inc.

Client: RMX-Global Ltd  
Product: RMX DRYWASH  
Dilution: As received  
AIMS 09-00-002 (Issue 3)

Date: 14-Nov-2014  
SMI/REF: 1410-189R2  
Report revised for product/Co. name change  
Page 2 of 4

- 5.3.1 Sandwich Corrosion Test: Testing shall be in accordance with ASTM-F-1110 using:
- aluminium alloy 2024 T3 clad against
  - anodised aluminium alloy 2024 T3 unclad and
  - anodised aluminium alloy 7075 T6 unclad.

After the test the aluminium alloy specimens shall show a rating less than or equal to 1 or no worse than a control sample prepared with distilled water.

	Aluminium alloy 2024 T3 clad against Anodised alum. 2024 T3 unclad	Aluminium alloy 2024 T3 clad against Anodised alum. 7075 T6 unclad
AS RECEIVED	2024 T3 clad: 1 2024 T3 unclad anodised: 1	2024 T3 clad: 1 7075 T6 unclad anodised: 1
CONTROL	2024 T3 clad: 1 2024 T3 unclad anodised: 1	2024 T3 clad: 1 7075 T6 unclad anodised: 1

Result Conforms

- 5.3.2 Total Immersion Test: Testing shall be in accordance with ASTM-F-483 using:
- aluminium alloys as per 5.3.1. above
  - low carbon steel, e.g. AMS 5045, XC18 or equivalent
  - cadmium plated steel, e.g. AMS 5045, XC18 (or equivalent), plated in accordance with AMS QQ-P-416 Type I Class 1 (or equivalent)

The immersion time shall be  $(24 \pm 0.5)$  h. The immersion temperature shall be  $(23 \pm 2)^{\circ}\text{C}$ .  
No significant visual change shall be evident. The max. permitted weight changes are as follows:  
Aluminum alloy = **0.02 mg/cm<sup>2</sup>** maximum.  
Low carbon steel = **0.8 mg/cm<sup>2</sup>** maximum  
Cadmium plated steel = **0.3 mg/cm<sup>2</sup>** maximum

ALLOY	WEIGHT CHANGE
	AS RECEIVED
Aluminum alloy 2024-T3 clad	+ 0.02 mg/cm <sup>2</sup> /24 hrs
Anodized aluminum alloy 2024-T3 unclad	+ 0.01 mg/cm <sup>2</sup> /24 hrs
Anodized aluminum alloy 7075-T6 unclad	+ 0.02 mg/cm <sup>2</sup> /24 hrs
Low carbon steel AMS 5045	0.04 mg/cm <sup>2</sup> /24 hrs
Cadmium plated steel AMS 5045 plated i.a.w. AMS-QQ-P-416 Type I Class 1	0.01 mg/cm <sup>2</sup> /24 hrs

Result Conforms



Client: RMX-Global Ltd  
Product: RMX DRYWASH  
Dilution: As received  
AIMS 09-00-002 (Issue 3)

Date: 14-Nov-2014  
SMI/REF: 1410-189<sub>R2</sub>  
Report revised for product/Co. name change  
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5.3.3 Hydrogen Embrittlement Test: The product shall be non-embrittling as determined in accordance with ASTM F 519, using type 1a, 1c, or 2a specimens, cadmium plated in accordance with MIL-STD-870, Class 1, Type I. Type 1a and Type 1c specimens shall be loaded to 45% of the predetermined notch fracture strength and Type 2a specimens loaded to 80% of the yield strength. The entire 2a stressed specimen, or just the notched area of the 1a and 1c stressed specimen, shall be immersed continuously in the solution under test for 150 hours at a temperature between 20-30°C (68-86°F).  
The maintenance material being tested shall not cause embrittlement of the test specimens.

Specimens: Type 1c, cadmium plated

**As received:**  
*Specimen #1: No failures occurred within 150 hours.*  
*Specimen #2: No failures occurred within 150 hours.*  
*Specimen #3: No failures occurred within 150 hours.*  
*Specimen #4: No failures occurred within 150 hours.*

Result Conforms

5.3.4 Paint Softening Test: Maintenance material compatibility shall be tested with Airbus approved paints and/or customer specific systems. Testing shall consist of three specimens for each of the following combinations. The substrate shall be clad aluminium alloy 2024 suitably pre-treated:

- Epoxy primer or polyurethane primer with or without polyurethane topcoat (interior paint scheme according to TN A.007.10050 OR epoxy primer to MIL-PRF-23377 Type I with or without polyurethane topcoat to MIL-PRF-85285 Type I or customer specific system).
- Basic primer plus relevant exterior paint scheme according to TN A.007.10050 OR epoxy primer to MIL-PRF-23377 Type I with polyurethane topcoat to MIL-PRF-85285 Type I OR external paint scheme conforming to AMS 3095 OR customer specific system.

The thickness and drying times of individual coats shall be in accordance with the manufacturer's instruction sheets. Testing shall be in accordance with ISO 1518 "Scratch Test" using the following test sequence: one hour immersion in the maintenance material at an ambient temperature (23 ± 2)°C, rinsing with water immediately after the immersion and drying for 1 hour at room temperature. The material shall not soften the paint coat and the Scratch Test shall have 90% of the original value after the immersion.

The agent being tested shall not produce any blistering, discoloration or staining.

Client: RMX-Global Ltd  
Product: RMX DRYWASH  
Dilution: As received  
AIMS 09-00-002 (Issue 3)

Date: 14-Nov-2014  
SMI/REF: 1410-189<sub>R2</sub>  
Report revised for product/Co. name change  
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5.3.4 Paint Softening Test:continued

Paint System		Weight required to produce scratch	
		Before exposure	After exposure
AS RECEIVED	Epoxy Primer without topcoat: Primer: MIL-PRF-23377 Type I, Epoxy, High Solids	Pass*	Pass*
	Epoxy primer with polyurethane topcoat: Primer : MIL-PRF-23377 Type I, Epoxy, High Solids Topcoat: MIL-PRF-85285 Type I, Polyurethane, High solids	Pass*	Pass*

**\* Using a 2,000 gram load (maximum load of the scratch apparatus)**  
**\*Conformance ("Pass") if no scratch occurs using a load equal to or greater than 1,800 grams (90% of 2,000 = 1,800), and there is no evidence of blistering, discoloration or staining.**  
  
Result           \*Conforms          

**55.3.5 Acrylic Crazing Test:** Material conforming to MIL-P-25690 Type C shall be tested in accordance with ASTM-F-484. The maintenance materials shall not craze, crack, stain or discolor the test specimens.  
  
**As received: No evidence of craze, crack, stain or discolor.**

Result           Conforms          

**5.3.6 Polycarbonate Crazing Test:** Material conforming to ASTM-D-3935 or AMS-P-83310 shall be tested in accordance with the method for the determination of stress crazing detailed in ASTM F 484.

Specimens shall be stressed for (30 ± 2) minutes to an outer stress of 21MPa (3000 psi) at a temperature of (23 ± 2)°C.

**As received: No evidence of craze, crack, stain or discolor.**

Result           Conforms



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Attn: Michael Drayton  
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Date: 14-Nov-2014

SMI/REF: 1410-189<sub>R2</sub>  
Report revised for product/Co. name change

Product: **RMX DRYWASH** (received 16-Oct-2014)

Dilution: As received

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## BOEING D6-17487 REVISION T

*Exterior and General Cleaners and Liquid Waxes,  
Polishes and Polishing Compounds*

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Sandwich Corrosion Test

Conforms

Acrylic Crazing Test

Conforms

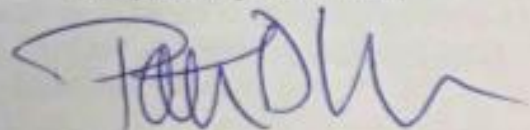
Paint Softening Test

Conforms

Hydrogen Embrittlement Test

Conforms

Respectfully submitted,



Patricia D. Viani, SMI, Inc.

Client: RMX-Global Ltd  
Product: **RMX DRYWASH**  
Dilution: As received

Date: 14-Nov-2014  
SMI/REF: 1410-189<sub>R2</sub>  
Report revised for product / Co. name change

BOEING D6-17487 REVISION T (*Exterior & General*)

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Sandwich Corrosion Test: Specimen preparation, testing, and interpretation shall be in accordance with ASTM F1110 using the following materials and with the following exceptions:

a. Reagents and materials exception:

- (1). Clad 7075-T6 aluminum alloy in accordance with QQ-A-250/13 (AMS 4049 or AMS-QQ-A-250/13 optional) (2024-T3 Alclad specimens are neither required nor optional.)
- (2) Bare 7075-T6 aluminum alloy in accordance with QQ-A-250/12 (AMS 4045 or AMS-Q-A-250/12 optional) anodized in accordance with BAC 5019 or MIL-A-8625, Type I.
- (3) Anodize shall be sealed. (2024-T3 nonclad specimens are neither required nor optional).
- (4) Distilled or deionized water may be used in place of ASTM F1193, Type IV reagent grade water for control specimens.
- (5) The filter paper may be Whatman No. 5 or equivalent in place of Whatman GFA glass fiber paper.

b. Procedure exceptions:

- (1) The filter paper strips shall be 1 by 3 inches and shall be placed in the center of the sandwiched specimens.
- (2) Each sandwich specimen shall be held together with waterproof tape, with no more than 1 piece of tape (maximum width 0.75 inch) on each of two opposite edges.

c. Interpretation of result exceptions:

- (1) Leaching or lightening of the chromate sealed anodize coating shall not be cause for rejection.
- (2) Deposits or residues from the material being tested that are not products of corrosion of the test panel surface shall not be cause for rejection.
- (3) Special procedure for evaluation of fire extinguishing foams and liquids.

Panels with very light darkening or staining, which have no obvious metal attack or pitting, may be swabbed (cotton-tipped swabs or cotton gauze) with a 0.26 mole/liter sulfuric acid solution and re-examined. If the coloration is substantially removed and there is no evidence of metal attack or pitting, the condition shall not be cause for rejection. (The 0.26 mole/liter sulfuric acid solution can be prepared by adding 1.5 cc of concentrated sulfuric acid (SG = 1.84) to 100 cc of distilled or deionized water.

- (4) Panels shall have a rating of 1 (no more than 5 percent of the surface area shall be corroded) or better in accordance with ASTM F 1110. The preferred method of determining the corroded area is by using image analysis. Other means approved by the purchaser may be substituted.
- (5) Any corrosion in excess of that shown by the control group shall be cause for rejection.



Client: RMX-Global Ltd  
Product: **RMX DRYWASH**  
Dilution: As received  
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Report revised for product / Co. name change  
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Sandwich Corrosion Test: continued

	Bare 7075-T6 (AMS 4045) Anodized per BAC 5019 (Type 3 chromate seal)	Clad 7075-T6 Aluminum (AMS 4049)
<b>PRODUCT</b>	<b>1</b>	<b>1</b>
Control	1	1

Result Conforms

Acrylic Crazing Test:

The material being tested shall not craze, crack, or etch acrylic test specimens when tested in accordance with ASTM F 484 using Type C (stretched acrylic plastic in accordance with MIL-P-25690) stressed to an outer fiber stress of 4500 psi.

**Type C (MIL-P-25690): No crazing, cracking, or etching**

Result Conforms

Paint Softening Test Procedure:

- a. Testing shall be in accordance with ASTM F502 using the following coating systems.
  - (1) BMS 10-79, Type II primer applied in accordance with BAC5882 plus BMS 10-60, Type II enamel in accordance with BAC5845.
  - (2) BMS 10-79, Type III primer applied in accordance with BAC5882, plus BMS 10-100 coating in accordance with BAC5797.
- b. Three specimens conforming to Section 12a.(1) and three specimens conforming to Section 12a(2) shall be used for each test condition.
- c. The material being tested shall not produce a decrease in film hardness greater than two pencils, or any discoloration or staining.

NOTE: Slight darkening of the BMS 10-100 surface is acceptable.

**As received:**

**Paint system 1: 0 pencil hardness change after 24 hour post-exposure dry time.  
No discoloration or staining.**

**Paint system 2: 0 pencil hardness change after 24 hour post-exposure dry time.  
No discoloration or staining.**

Result Conforms

Client: RMX-Global Ltd  
Product: **RMX DRYWASH**  
Dilution: As received

Date: 14-Nov-2014  
SMI/REF: 1410-189<sub>R2</sub>  
Report revised for product / Co. name change

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Hydrogen Embrittlement Test:

Hydrogen Embrittlement testing shall be in accordance with ASTM F 519 using cadmium plated Type 1a.2, Type 1c, or Type 2a specimens. All requirements of ASTM F519 for specimens, preparation, testing, and reporting shall apply. Type 1a.2 specimens shall meet the requirements of D6-4307.

***Specimens: Type 1c, cadmium plated per MIL-STD-870.***

***(45% load, 150 hours, notched immersed for the duration, room temp.)***

***As received:***

- #1: No failure occurred within 150 hours.***
- #2: No failure occurred within 150 hours.***
- #3: No failure occurred within 150 hours.***
- #4: No failure occurred within 150 hours.***

Result \_\_\_\_\_ Conforms \_\_\_\_\_



## RESEARCH & TECHNOLOGY REPORT SHILDON

## LABORATORY

Title: Initial Results for 9008 Dry Wash Testing

Project No: 18202

Report No: LR17-2018

Date: 09/05/2018

Previous reports: N/A

Report Author: M Rogers

c.c. L. Costello, R. Brown

### Introduction

Three dry wash solutions were tested on existing 9008 basecoat/clear coat scheme to determine if either of the solutions produced a change in colour, gloss or UV resistance. The existing scheme was as follows:

- 7049 primer
- 9008 basecoat (white)
- 9008 clear coat

The three test solutions were RMX Dry Wash, RMX Surface Protect and PPG Green Desoclean.

After application of the 9008 basecoat/clear coat scheme, the panels were left to air dry at 23°C for 7 days. Once dried, the dry wash solutions were applied to the surface as recommended by the supplier instructions.

### Results

The panels were tested for gloss before and after dry wash.

#### Initial Results

Dry Wash	Av. Gloss @60° Before wash	Av. Gloss @60° After wash	$\Delta E$
RMX Dry Wash	94.0	88.4	0.16
RMX Surface Protect	92.8	89.8	0.38
PPG Green Desoclean	95.15	88.6	0.26

It can be seen from the results table that application of dry wash solutions reduces the gloss of the 9008 basecoat/clear coat scheme, however visually little difference can be seen between panels. The application of dry wash does not have any effect on the colour of the basecoat/clear coat system.



### Further Work

Testing after 2 weeks in QUV:

Sample	Gloss after 2 weeks in QUV	Colour after 2 weeks in QUV ( $\Delta E$ )	Colour Effect
RMX Dry Wash	95.9	2.82	More Yellow
RMX Surface Protect	93.8	2.66	More Yellow
PPG Green Desoclean	90.8	2.60	More Yellow
No Wash	96.4	2.34	More Yellow

From the table above it can be seen that exposure to UV has little effect on the gloss of the 9008 system, however does impact the colour. All samples appear more yellow, but the results are in line with the standard 9008 basecoat/clear coat panel which had no wash applied.

### **Conclusion**

It can be concluded that the use of RMX Dry Wash and RMX Surface Protect has little effect on the gloss, colour and UV resistance of PPG's Basecoat/clear-coat system.

### APPROVALS

**Matthew Rogers**  
Report Author

**L Costello**  
Coatings Technical Team Leader

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### IMPORTANT

The above performance data were obtained under laboratory test conditions and are given for guidance only. Given the number of potentially relevant variables, specific testing under actual conditions must be carried out in order to determine the suitability of the product for its intended purpose. All products supplied and technical advice given are subject to PPG Aerospace's standard terms of sale.

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